

Notice of Allowability

Application No.

10/662,768

Applicant(s)

WICKMAN, RANDY

Examiner

Michael P. Mooney

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/14/06 Terminal Disclaimer.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

The receipt and subsequent Office approval of a proper Terminal Disclaimer is acknowledged. The instant application is now in proper condition for allowance. The amendment below corrects a minor spelling error.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

At line 9 of claim 12, please delete the word "descrete" and replace with --discrete--.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The prior art, either alone or in combination, does not disclose or render obvious a method comprising disposing a plurality of discrete refracting or reflecting elements around the axis of transmission within a body of the optically transparent substrate, said plurality of refracting or reflecting elements selected to reflect light away from the plurality of refracting or reflecting elements to thereby confine the optical beam to the axis of transmission in combination with the rest of claim 1.

It is noted that the claim 1 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious a device comprising a plurality of discrete refracting or reflecting elements adapted to reflect the optical beam away from the plurality of refracting or reflecting elements, said refracting or reflecting elements being disposed around the axis of transmission within a body of the optically transparent substrate to confine the optical beam to the axis of transmission in combination with the rest of claim 12.

It is noted that the claim 12 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious a method comprising providing an optical via for shaping the transmission path of the optical signal, said optical via comprising a plurality of apertures formed in the second substrate that reflect light away from the plurality of refracting or reflecting elements to confine the optical signal to the optical via such that the transmission path of the optical device passes directly through the body of the substrate defined by the area encompassed by the plurality of apertures; aligning an optical fiber holder to the optical device using a plurality of guide pin apertures in the substrate and a respective plurality of guide pins and; coupling an optical signal of the optical device of the optical array to a respective optical fiber of the aligned optical fiber holder in combination with the rest of claim 25.

It is noted that the claim 25 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious a method comprising providing an optically transparent substrate with a plurality of apertures that reflect light away from the plurality of refracting or reflecting elements formed in the substrate;...coupling an optical signal of the optical device of the optical array to a respective optical fiber of the aligned optical fiber holder where the optical signal passes directly through the substrate and where the plurality of apertures together confine the optical signal within the area encompassed by the plurality of apertures in combination with the rest of claim 26.

It is noted that the claim 26 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious a device comprising an optical via comprising a plurality of apertures that reflect light away from the plurality of refracting or reflecting elements formed in the second substrate, such that an optical signal from the optical device traveling along the transmission path of the optical device passes directly through the body of the substrate defined by the area encompassed by the plurality of apertures and is confined within optical via in combination with the rest of claim 27.

It is noted that the claim 27 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious a device comprising an optically transparent substrate having apertures that reflect light away from the plurality of refracting or reflecting elements formed in the substrate,

where the apertures together form an optical via; an optical device having a transmission path of an optical beam that passes directly through a portion of the body of the optically transparent substrate defined by the optical via and where the apertures confine the optical beam to the via in combination with the rest of claim 28.

It is noted that the claim 28 is allowable because the unique combination of each and every specific element stated in the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 571-272-2422. The examiner can normally be reached during weekdays, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2883

you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).



Michael P. Mooney
Examiner
Art Unit 2883



Frank G. Font
Supervisory Patent Examiner
Art Unit 2883

FGF/mpm
9/16/06